

5 November, 1997

Mr. Chris Jones, Section Chief Raritan Region Land Use Regulation Program Department of Environmental Protection PO Box 439 Trenton, New Jersey 08625-0401

RE: New Jersey Freshwater Wetlands Protection Act

Letter of Interpretation Cytec Industries Inc.

Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14

Borough of Carteret, Middlesex County, New Jersey

Certified Mailing P-158-542-323

Job No. 97201

#### Dear Mr. Jones:

Pursuant to the passage of the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1), this correspondence and attached information is an application for a Letter of Interpretation on the above referenced property. This application is being submitted on behalf of the applicant, Cytec Industries Inc.

Enclosed, please find three bound application packages containing the following information as needed for a Letter of Interpretation for the site:

- 1. A copy of the Middlesex County Road Map for the site (Fig. 1);
- 2. A copy of the U.S.G.S. Map for the site (Fig. 2);
- 3. A copy of the Tax Map for the site (Fig. 3);
- 4. A copy of the National Wetlands Inventory Map for the site (Fig. 4);
- 5. A copy of the New Jersey Freshwater Wetlands Map for the site (Fig. 5);
- 6. A copy of the Soil Survey Map for the site (Fig. 6);
- 7 Photographs of the site;
- 8. Soil Logs;
- 9. Vegetative species for each soil log:
- 10. Resume of person(s) who prepared the proposed wetland boundary;
- 11. A list of all property owners within 200 feet of the site;
- 12. Copies of the proof of notice that the information was sent to the following:

23 RUNNING BROOK DR

PERRINEVILLE, Nº 08535

732 446 3669

FAX 732 446 2381

email shisenv@bellatlantic net

Borough of Carteret Clerk
Borough of Carteret Environmental Commission
Borough of Carteret Planning Board
Borough of Carteret Construction Official
Middlesex County Planning Board
All owners within 200 feet

- 13. Verification that all information submitted to the Department was forwarded to the Borough of Carteret Clerk (Certified Mailing P-158-542-2324.
- 14. Copies of the Wetland location Map and impoundment cross section drawings by Blasland, Bouck & Lee, Inc. and
- 15. A completed LURP form.

Also included is a check for the application fee of \$3,890.00 for the 104 acre site, (\$250.00 plus \$35.00 per acre or part of). If you have any questions, please do not hesitate to contact me.

Sincerely,

SHISLER ENVIRONMENTAL CONSULTANTS, INC.

Joseph K. Shisler, Ph.D.

President

pc: Borough of Carteret Clerk

# Wetland Delineation Report Prepared by: Shisler Environmental Consultants, Inc.

#### **Contains:**

- 1. A copy of the Middlesex County Road Map for the site (Figure 1);
- 2. A copy of the U.S.G.S. Map for the site (Figure 2);
- 3. A copy of the Tax Map for the site (Figure 3);
- 4. A copy of the National Wetlands Inventory Map for the site (Figure 4);
- 5. A copy of the New Jersey Freshwater Wetlands Map for the site (Figure 5);
- 6. A copy of the Soil Survey Map for the site (Figure 6);
- 7. Photographs of the site;
- 8. Soil Logs;
- 9. Vegetative species for each soil log; and
- 10. Resume of person(s) who prepared the proposed wetland boundary.



# WETLAND DELINEATION REPORT

# **CYTEC IMPOUNDMENTS**

Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14

Borough of Cateret, Middlesex County, New Jersey

10 October, 1997

Prepared for:

Cytec Industries Inc.
5 Garret Mountain Plaza
West Paterson, New Jersey 07424

Job No. 97201

Joseph K. Shisler, Ph.D.

23 RUNNING BROOK DR.

PERRINEVILLE, NJ 08535

908.446.3669

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#### INTRODUCTION

The purpose of the present report is the delineation and description of wetland areas on a 120 acre site located adjacent to the Rahway River and Potters Island in the Borough of Carteret, Middlesex County, New Jersey (see Figures 1, 2 & 3). The wetland delineation was performed by Shisler Environmental Consultants, Inc., at the request of the owner of the site, Cytec Industries Inc, West Paterson, New Jersey. The wetland delineation was performed to determine environmentally sensitive areas on the site. Six sludge impoundments present at the site were not identified as wetlands since they are managed impoundments and are not considered wetlands [CFR 328.3(7)]. The delineation was limited to berms and areas outside of impoundments. The attached wetlands location map prepared by Blasland, Bouck & Lee, Inc. identifies these areas.

The wetland delineation was performed in June and July, 1997. The New Jersey Department of Environmental Protection (NJDEP), Land Use Regulation Program (Program) (under the Freshwater Wetlands Protection Act: N.J.S.A. 13:9B) will be requested to verify the wetland boundary on the site and to confirm their jurisdiction. No alterations should take place in delineated wetland areas or their transition areas until the necessary state and federal permits have been obtained.

#### SITE DESCRIPTION

The site (Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14), comprises approximately 104 acres of land in the Borough of Carteret, Middlesex County, New Jersey (see Figure 3). Cytec Industries Inc. (Cytec) is the present owner of the site. Six (6) sludge impoundments are present on-site (see attached wetlands location map and impoundment cross-section maps prepared by Blasland, Bouck & Lee, Inc.). The site was used to place process waste sludge material within diked impoundment areas. The process sludge was generated at the Warners Plant, a Cytec chemical manufacturing facility located across the Rahway River in Linden, New Jersey. The Warners Plant is not contiguous with the Carteret Impoundments. The American Cyanamid Company operated the bermed Impoundments from 1930 to 1974. Each impoundment area is surrounded by a dike to contain the material and stormwater. In the summer of 1977, a severe dust problem created by surface residuals drying out had caused the New Jersey Turnpike to be shut down for a few hours. As of a result of this, American Cyanamid entered into a Consent Decree (CD) with the NJDEP to address the dust problem. In 1988, the process of filling, grading, and the establishment of vegetative and water covers on the Impoundments was completed. This addressed the dusting problem and met the requirements of the CD. The area surrounding the site is industrial, with fuel storage terminals to the south and southeast, and the Cytec Warners Plant to the east across the Rahway River. The site is bordered by the Rahway River on the north and east and by wetlands areas on the west.

#### **METHODS**

Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" (Federal Register, July 19, 1977). Wetlands are determined using the multiparameter approach, meaning that three parameters, hydric soils, hydrophytic vegetation, and wetland hydrology, must be present in order to classify an area as wetlands. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper horizons (Soil Conservation Service 1987). Hydrophytic vegetation refers to plant species which are specifically adapted to growth and reproduction under periodically saturated root zone conditions during at least a portion of the growing season (N.J.A.C. 7:7A-1.4). Wetland hydrology is the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation (Environmental Laboratory, 1987). Wetlands can only be determined by a site inspection using the multi-parameter approach as promulgated by the Federal Interagency Committee for Wetland Delineation (FICWD 1989).

The United States Fish and Wildlife Service system classify wetlands using the following objectives: (1) to develop ecologically similar habitat units; (2) to arrange these units in a system that would facilitate resource management decisions; (3) to furnish units for inventory and mapping; and (4) to provide uniformity in concept and terminology throughout the country (Cowardin, et al. 1979).

#### Vegetation

Hydrophytic vegetation includes any macroscopic plant life growing in water or on a substrate that is at least periodically deficient of oxygen as a result of excessive water content. The term prevalence of hydrophytic vegetation means that the vegetational association is dominated by hydrophytic species. The United States Fish and Wildlife Service has prepared a comprehensive list of the Nation's hydrophytes to classify the species in their relationship to wetlands (see Table 1 for their description). Vegetation is the most conspicuous component of wetlands identification.

The hydrophytic vegetation criterion is evaluated as follows (FICWD 1989):

- 1. An area has hydrophytic vegetation when, under normal circumstances:
  - a) More than 50 percent of the composition of the dominant species from all strata are obligate wetland (OBL), facultative wetlands (FACW), and/or facultative (FAC) species, or

b) A frequency analysis of all species within the community yields a prevalence index value of less than 3.0 (where OBL = 1.0, FACW = 2.0, FAC = 3.0. FACU = 4.0, and UPL = 5.0).

CAUTION: When a plant community has less than or equal to 50 percent of the dominant species from all strata represented by OBL, FACW, and/or FAC species, or a frequency analysis of all species within the community yields a prevalence index value of greater than or equal to 3.0, and hydric soils and wetland hydrology are present, then the area also has hydrophytic vegetation. (Note: These areas are considered problem area wetlands.)

2. For each stratum (e.g. tree, shrub, and herb) in the plant community, dominant species are the most abundant plant species (when ranked in descending order of abundance and cumulatively totaled) that immediately exceed 50 percent of the total dominance measure (e.g., basal area or aerial coverage) for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure for the stratum. All dominants are treated equally in determining the presence of hydrophytic vegetation.

#### Soils

The soil parameter is used in the evaluation of wetlands to determine the presence of hydric soils. A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part (SCS 1987).

Determination of the presence of hydric soils is made using the following criteria:

- 1. All Histosols except Folists, or
- 2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, or Pell great groups of Vertisols that are:
  - a. Somewhat poorly drained and have a water table less than 0.5 feet from the surface at some time during the growing season, or
  - b. Poorly drained or very poorly drained and have either;
    - (1) Water table at less than 1.0 feet from the surface at some time during the growing season if permeability is equal to or greater than 6.0 inch/hour in all layers within 20 inches, or
    - (2) Water table at less than 1.5 feet from the surface at some point during the growing season if permeability is less than 6.0 in/hr. in any layer within 20 inches, or
- 3. Soils that are ponded for long durations or very long durations during the growing season, or
- 4. Soils that are frequently flooded for long duration or very long duration during the growing season.

The determination of soil series on a site can only be accomplished through a field inspection and comparison of the field soil profiles with those described by the Soil Conservation Service. Soils were field evaluated to determine the presence of any hydric soils on the site. Soil profiles were determined using a 3.5 inch soil auger to a depth of 3 feet. Soil colors were determined using Munsell Soil Colors Charts (Kollmorgen Corp. 1975). See Appendix I for soil logs recorded on the project site by Shisler Environmental Consultants, Inc.

#### Hydrology

Wetland hydrology is defined, in general terms, as permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the soil (FICWD, 1989). The driving force in the creation of wetlands is "wetland hydrology." It is the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation (Environmental Laboratory 1987). This inundation or saturation can come from many sources, such as direct precipitation, surface run-off, ground water, tidal influence, and overland flooding (Sipple, 1988). The wetland hydrology criterion is defined by FICWD (1989) as follows:

- 1. Saturation to the surface normally occurs when soils in the following natural drainage classes meet the following conditions:
  - a) In somewhat poorly drained mineral soils, the water table is less than 0.5 feet from the surface for usually one week or more during the growing season; or
  - b) In low permeability (<6.0 inches/hour), poorly drained or very poorly drained mineral soils, the water table is less than 1.5 feet from the surface for usually one week or more during the growing season; or
  - c) In more permeable (>6.0 inches/hour), poorly drained or very poorly drained mineral soils, the water table is less than 1.0 feet from the surface for usually one week or more during the growing season; or
  - d) In poorly drained or very poorly drained organic soils, the water table is usually at a depth where saturation to the surface occurs more than rarely. (Note: Organic soils that are cropped are often drained, yet the water table is closely managed to minimize oxidation of organic matter; these soils often retain their hydric characteristics and if so, meet the wetland hydrology criterion).
- 2. An area is inundated at some time if ponded or frequently flooded with surface water for one week or more during the growing season.

#### **Site Inspection**

The site was field inspected in June and July, 1997 by examining the entire site for changes in vegetational associations and topography that might indicate the potential presence of wetlands. Soil borings were performed if vegetation and hydrology suggested wetland conditions. The wetland boundary was flagged with pink glo flagging at approximately 75 to 100 foot intervals. Locations of the logged soil borings were marked with orange glo flagging (see enclosed wetland location map prepared by Blasland, Bouck & Lee, Inc.). Presence or absence of wetlands was determined using the multiparameter approach. Wetlands were delineated by Shisler Environmental Consultants, Inc. personnel (see Appendix for resume).

#### RESULTS

#### Federal and State Wetlands Mapping

The U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) for New Jersey indicates a palustrine emergent (PEM), estuarine intertidal flat (E2FL), estuarine intertidal emergent (E2EM), and upland (U) for the site, on their Arthur Kill, NY-NJ Quadrangle map (see Figure 4).

The New Jersey Freshwater Wetland Map for the area (Arthur Kill, NW 63-1) indicates an upland, wetland line (424 UWL) and Upland (01) for the site (see Figure 5). Wetland areas were found to be present on-site by Shisler Environmental Consultants, Inc. (see site plan). The wetland maps should be used as a guide in wetland delineation and only through field inspection using the federal method for determining jurisdictional wetlands can actual jurisdictional limits (regulated wetland areas) be determined. Verification of these limits by a responsible federal and/or state agency is the suitable procedure.

#### Vegetation

The on-site vegetation consists of species common with disturbed areas. A salt-marsh was present adjacent to the Rahway River. The saltmarsh graded to a high marsh ecotone area as the elevation increased along the diked areas surrounding the impoundments. The majority of the areas within the impoundments consisted of upland species that are a result of a management program approved by the state to control erosion.

The saltmarsh was dominated by Spartina patens (Saltmeadow Cordgrass, FACW+), Phragmites australis (Common Reed, FACW) and Juncus gerardii (Saltmeadow Rush, FAW+). A high marsh ecotone was present along the diked areas surrounding the impoundments near the salt marsh. Species present there are commonly found in disturbed areas. This area was dominated by Ailanthus altissima (Tree of Heaven, NL), Prunus serotina (Black Cherry, FACU), Morus rubra (Red Mulberry, FACU), Robinia pseudo-acacia (Black Locust, FACU-), and Gleditsia triacanthus

(Honey Locust, FAC-) trees. Closer to the saltmarsh/high marsh ecotone boundary were Bacharis halimifolia (Eastern false-willow, FACW) and Iva frutescens (Big-leaf sumpweed, FACW+) shrubs. Chrysanthemum leucanthemum, (Oxeye Daisy, NL), Verbascum blattaria (Moth Mullein, NL), and Ipomoea lacunosa (Small-flower White Morning-Glory, FACW) were present in the herbaceous layer.

The majority of vegetation found within the impoundments on the remainder of the site consisted of successional herbaceous species that are commonly found to succeed in disturbed areas. Artemisia vulgaris (Common Mugwort, NL) was a dominant species here. Also present were Phragmites australis (Common Reed, FACW), V. blattaria, Phytolacca americana (Pokeweed, FACU+), Andropogon virginicus (Broom-sedge, FACU), Linaria vulgaris (Butter and Eggs, NL), Rumex crispus (Curled Dock, FACU), Coronilla varia (Crown Vetch, NL), Asclepias syriaca (Common Milkweed, NL), C. leucanthemum, Apocynum androsaemifolium (Spreading Dogbane, NL), Solidago sempervirens (Seaside golden-rod, FACW), Melilotus alba (White Sweetclover, FACU-), Melilotus officinalis (Yellow Sweetclover, FACU-), and Verbascum thapsus (Common Mullein, NL). Rhus copallinum (Dwarf Sumac, NL) shrubs and Celastrus scandens (American Bittersweet, FACU) vines were present on some areas of the site.

After site inspection, Shisler Environmental Consultants, Inc. concluded that the vegetation on the majority of the site could be used in the wetland determination. Hydrophytic vegetation was dominant in all areas on the site mapped as wetland, therefore meeting the criteria for hydric conditions as promulgated by the Federal Interagency Committee for Wetland Delineation (1989). In some areas *P. australis* was dominate. *P. australis* is a common species that can occupy and dominate disturbed sites. The areas that *P. australis* dominated that were not delineated are part of areas that have been filled with chemical manufacturing process waste sludge.

#### Soils

The U.S. Department of Agriculture Soil Conservation Service, Middlesex County Soil Survey (Powley, 1987), atlas sheet number 4 (see Figure 6) indicates two soil mapping units for the site. The soils for the site are mapped (PW) Psamments, waste substratum, (SU) Sulfaquents and Sulfihemists, frequently flooded and Urban land (UL). The following is a description of each soil series.

#### **Psamments**

Psamments series consist of moderately deep to deep, excessively drained to somewhat poorly drained soils that formed in stratified or graded sandy fill material (Powley 1987). The soils are 20 to 60 inches deep or more to the original soil or waste fill. They are extremely acid or very strongly acid. They consist of dredged material principally from the South River and the Raritan River, that has been placed on adjoining Sulfaquents or Sulfihemists. There are a wide range of soil characteristics from texture and thickness.

#### Sulfaquents and Sulfihemists

4

Sulfaquents consists of deep, poorly drained or very poorly drained, nearly level mineral soils that are subject to tidal flooding. The soils are on tidal flats adjacent to bays and tidal streams. The surface layer is slightly acidic and has a hue of 7.5YR to 10YR, value of 3 or 4, and chroma of 2. The dominant texture is muck. The thickness of the surface layer is variable, but generally is 10 to 16 inches. The substratum dominantly is neutral and has hue of 10YR or 5Y, value of 3 to 5, and chroma of 1 or 2. In some profiles, dark yellowish brown mottles are in the substratum which is mainly loamy sand or sand but has some mucky lenses (Powley 1987). Sulfaquents are classified as a Group 1 hydric soil according to Tiner (1985) meaning, they nearly always display consistent hydric conditions. Sulfaquents would meet the hydric soil criterion since they are poorly drained to very poorly drained and frequently flooded (FICWD 1989).

Sulfihemists consist of deep, poorly drained or very poorly drained, nearly level organic soils that are subject to tidal flooding. The soils formed over stratified silty and sandy sediments of fluviomarine origin. The surface and subsurface layers dominantly are neutral or have a hue of 10YR or 2.5Y, and a value of 3 or 4, with a chroma of 0 to 2. The upper organic layer is generally more than 20 inches thick and is muck. The mineral layers below it range from silt loam to silty clay. The depth to the sandy substratum generally is more than 51 inches.

#### **Urban Land**

Urban land consists of areas where more than 80 percent of the surface is covered by industrial plants, shopping and business centers, and other structures. These areas are usually nearly level to moderately sloping, but a few are strongly sloping and steep. Fill material has been used in places to build up wet soils. Most areas have been excavated or filled with material that is now almost totally paved.

The soils mapped on Atlas Sheet #4 of the Soil Survey of Middlesex County, New Jersey, support the argument that the site had been previously used for the deposition of process waste sludge materials. The majority of the site is mapped as (PW) Psamments, waste substratum with the next largest area mapped as (UL) Urban land. Psamments consist of dredged material principally from the South River and the Raritan River. Urban land consists of areas where more than 80 percent of the surface is covered by industrial plants, shopping and business centers, and other structures.

After site inspection, Shisler Environmental Consultants, Inc. concluded that the soils mapped as wetlands on site (see site plan) would meet the criteria for hydric conditions as promulgated by the Federal Interagency Committee for Wetland Delineation (1989).

#### Hydrology

The site drains to the Rahway River which is a tributary to the Arthur Kill and is in the in the Passaic, Hackensack and New York Harbor Complex Basin. The Rahway River is classified as SE3 (saline estuarine waters) by the NJDEP, Office of Land and Water Planning, April 1994, Surface Water Quality Standards N.J.A.C. 7:9B. There are areas on-site that periodically hold rain water used as "water covers" to lessen the possibility of dust particles becoming air-borne. Waste treatment systems, including treatment ponds or lagoons are not "waters of the United States" [CFR 328.3(7)] therefore these areas would not be considered as such.

After the detailed site inspection, Shisler Environmental Consultants, Inc. concluded that the dominant hydrology on the site occurs within the wetlands adjacent to the Rahway River where the hydrology parameter has been met as set forth by the Federal Interagency Committee for Wetland Delineation (1989).

#### **SUMMARY**

The project site, (Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14) is located in the Borough of Carteret, Middlesex County, New Jersey. Cytec Industries Inc. (Cytec) is the present owner of the site. The site was used to place processed waste sludge material within diked impoundment areas. The process sludge was associated with manufacturing activities at the Warners Plant, a Cytec chemical manufacturing facility located across the Rahway River in Linden, New Jersey. The Warners Plant is not contiguous with the Carteret Impoundments site (see attached wetlands location map and impoundment cross-section maps prepared by Blasland, Bouck & Lee, Inc.). The American Cyanamid Company operated the bermed Impoundments from 1930 to 1974. Each impoundment area is surrounded by a dike to contain the material and stormwater. In the summer of 1977, a severe dust problem created by surface residuals drying out had caused the New Jersey Turnpike to be shut down for a few hours. As of a result of this, American Cyanamid entered into a Consent Order (CD) with the NJDEP to address the dust problem. In 1988, the process of filling, grading, and the establishment of vegetative and water covers on the Impoundments was completed. This addressed the dusting problem and met the requirements of the CD. Six sludge impoundments present at the site were not identified as wetlands since they are managed impoundments and are not considered wetlands [CFR 328.3(7)].

The site drains to the Rahway River. The Rahway River is a tributary to the Arthur Kill and is in the Passaic, Hackensack and New York Harbor Complex Basin. The Rahway River is classified as SE3 (saline estuarine waters) by the New Jersey Department of Environmental Protection, Office of Land and Water Planning, April 1994, Surface Water Quality Standards N.J.A.C. 7:9B. There are areas on-site that periodically hold rain water used as "water covers" to lessen the possibility of dust particles becoming air-borne. Waste treatment systems, including treatment ponds or lagoons are not "waters of the United States" [CFR 328.3(7)] therefore these areas would not be considered as such.

The wetlands on site are not considered a priority wetland by the U.S. Environmental Protection Agency (EPA) in their publication *Priority Wetlands List for the State of New Jersey* (March, 1994). However, according to the EPA, the Arthur Kill, located east of the site is considered a priority wetland. The Borough of Carteret has not been identified by the Program as an area that has documented records for *Helonias bullata* (Swamp Pink, OBL) which is a federally threatened species.

Based on the review of available published information on the project site and a detailed inspection using the State mandated three-parameter methodology for the delineation of wetlands, it is Shisler Environmental Consultants Inc.'s opinion that the wetlands present on the site indicated on the attach wetland location map prepared by Blasland, Bouck & Lee, Inc. is accurate as shown.

Final determination of the wetland boundary must be made by the NJDEP, Land Use Regulation Program. In accordance with an agreement between the Program and the U.S. Army Corps of Engineers Philadelphia and New York Districts, the Program is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. Any alteration to the wetlands and the transition zone will require a permit from the Program pursuant to the Freshwater Wetlands Protection Act (N.J.S.A. 13.9B).

#### LITERATURE CITED

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Sipple, W.S. 1987. Wetland Identification and Delineation Manual. Office of Wetlands Protection, U.S. Environmental Protection Agency, Washington, DC.

Tiner, R.W., Jr. 1985. Wetlands of New Jersey. U.S. Fish and Wildlife Service, National Wetlands Inventory, Newton Corner, MA. 117 pp.

USDA-Natural Resource Conservation Service. 1995. Hydric soils of the United States. Washington, DC.

Table 1. The following is a list of plant species that commonly occurred on Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14 located in the Borough of Carteret, Middlesex County, New Jersey. The USFWS wetland indicator classification of each species is provided. Nomenclature follows USFWS (1988).

#### Scientific Name (Common Name, Indicator Status)

Ailanthus altissima (Tree of Heaven, NL)

Ambrosia artemisiifolia (Common Ragweed, FACU)

Andropogon virginicus (Broom-sedge, FACU)

Apocynum androsaemifolium (Spreading Dogbane, NL)

Artemisia vulgaris (Common Mugwort, NL)

Asclepias syriaca (Common Milkweed, NL)

Bacharis halimifolia (Eastern false-willow, FACW)

Celastrus scandens (American Bittersweet, FACU)

Chrysanthemum leucanthemum, (Oxeye Daisy, NL)

Coronilla varia (Crown Vetch, NL)

Dactylis glomerata (Orchard grass, FACU)

Elaeagnus angustifolia (Russian Olive, FACU)

Gleditsia triacanthus (Honey Locust, FAC-)

Impatiens capensis (Jewelweed, FACW)

Ipomoea lacunosa (Small-flower White Morning-Glory, FACW)

Iva frutescens (Big-leaf sumpweed, FACW+)

Juncus gerardii (Saltmeadow Rush, FAW+)

Linaria vulgaris (Butter and Eggs, NL)

Liquidamber styraciflua (Sweet Gum, FAC)

Melilotus alba (White Sweetclover, FACU-)

Melilotus officinalis (Yellow Sweetclover, FACU-)

Morus rubra (Red Mulberry, FACU)

Parthenocissus quinquefolia (Virginia Creeper, FACU)

Phragmites australis (Common Reed, FACW)

Phytolacca americana (Pokeweed, FACU+)

Prunus serotina (Black Cherry, FACU)

Rhus copallinum (Dwarf Sumac, NL)

Robinia pseudo-acacia (Black Locust, FACU-)

Rosa multiflora (Multiflora Rose, FACU)

Rumex crispus (Curled Dock, FACU)

Sambucus canadensis (Common Elderberry, FACW-)

Solidago sempervirens (Seaside golden-rod, FACW)

Spartina patens (Saltmeadow Cordgrass, FACW+)

Toxicodendron radicans (Poison Ivy, FAC)

Verbascum blattaria (Moth Mullein, NL)

Verbascum thapsus (Common Mullein, NL)

Continued on next page

#### Continued from previous page

OBL: A plant species that is generally (>99% of the time) found only in wetlands under natural conditions.

FACW: A plant species that usually (>66% to 99% of the time) is found in wetlands, but which may be found occasionally in uplands under natural conditions.

FAC: A plant species that sometimes (>33% to 66% of the time) is found in wetlands, but which may also be found commonly in uplands.

FACU: A plant species that is seldom (<33% of the time) found in wetlands and that usually occurs in uplands.

NI: Currently no agreement as to indicator status.

NC: A plant species not classified (recent additions to indicator list).

NL: A plant species not listed.

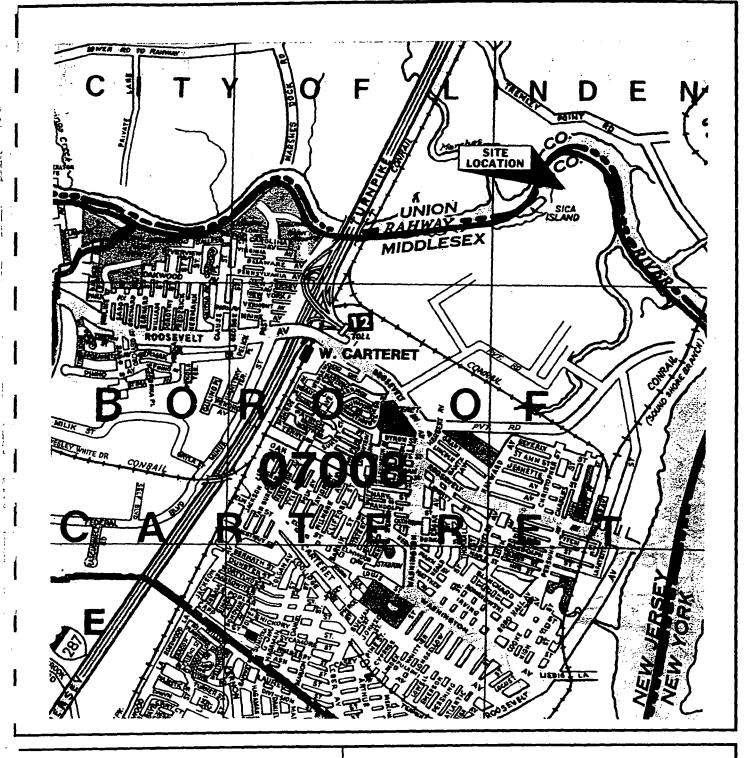
NS: A plant that has been identified to only Genus.

note: A negative sign (-) indicates a species less frequently found in wetlands. A positive sign (+) indicates a species more frequently found in wetlands (Reed 1986).

# **FIGURES**

(Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14)
(BOROUGH OF CARTERET, MIDDLESEX COUNTY, NEW JERSEY)

BY



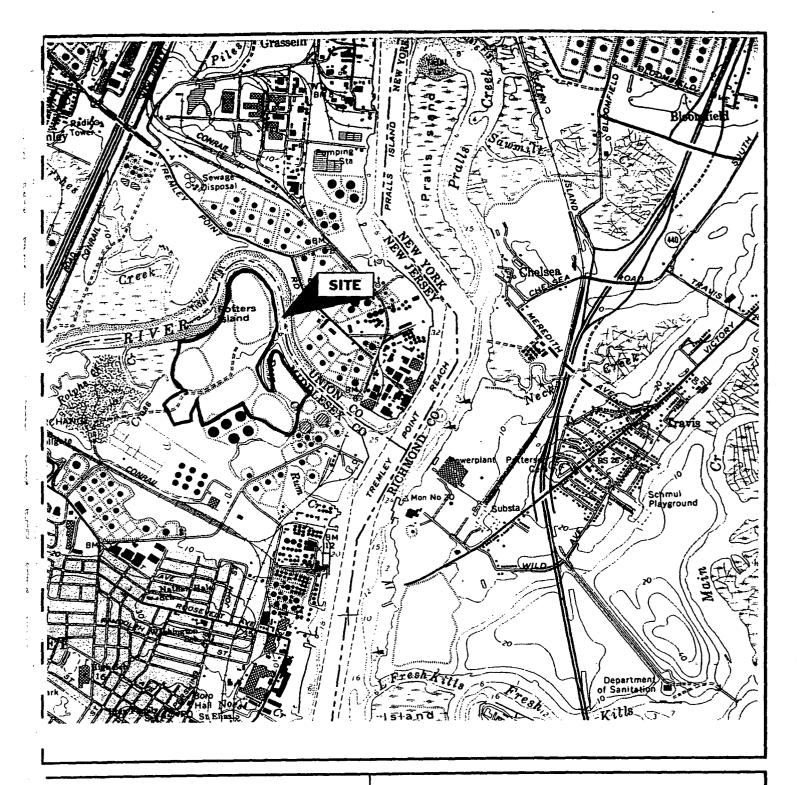
SOURCE: Hagstrom Middlesex County Atlas (1989)

#### **SCALE:**

Scale in Feet (Approximate)
0 1000 2000
0 500
Scale in Meters (Approximate)



FIGURE 1
SITE VICINITY MAP
Cytec Impoundments
Carteret
Middlesex County, New Jersey



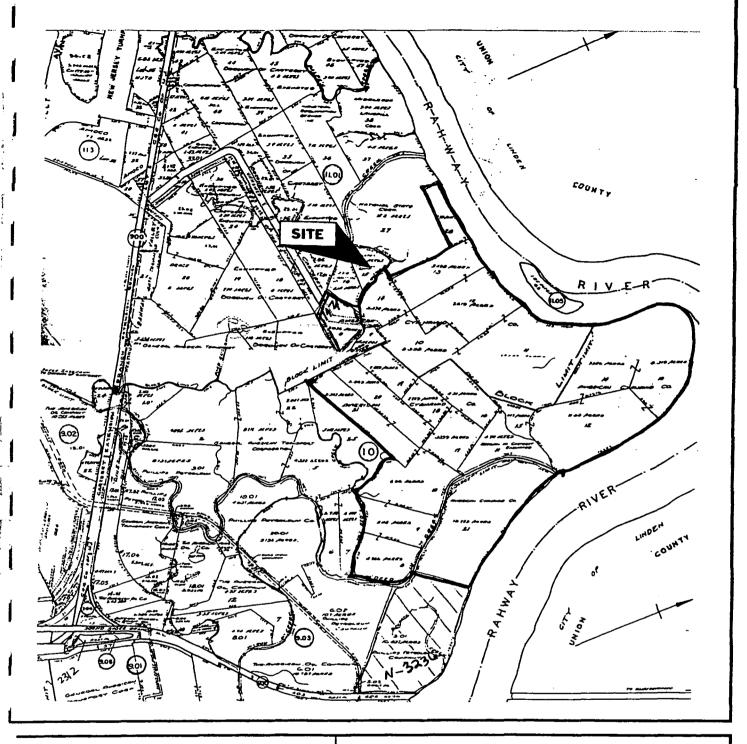
SOURCE: U.S.G.S. 7.5' Minute Series Topographic Map, Arthur Kill, NY-NJ Quadrangle, Photorevised 1981

SCALE: 1" - 2,000'

State Plane Coordinates 644200N 2125500E



FIGURE 2
U.S.G.S. MAP
Cytec Impoundments
Carteret
Middlesex County, New Jersey



SOURCE: Assessment Map, Borough of Carteret Sheet #'s 10 & 11

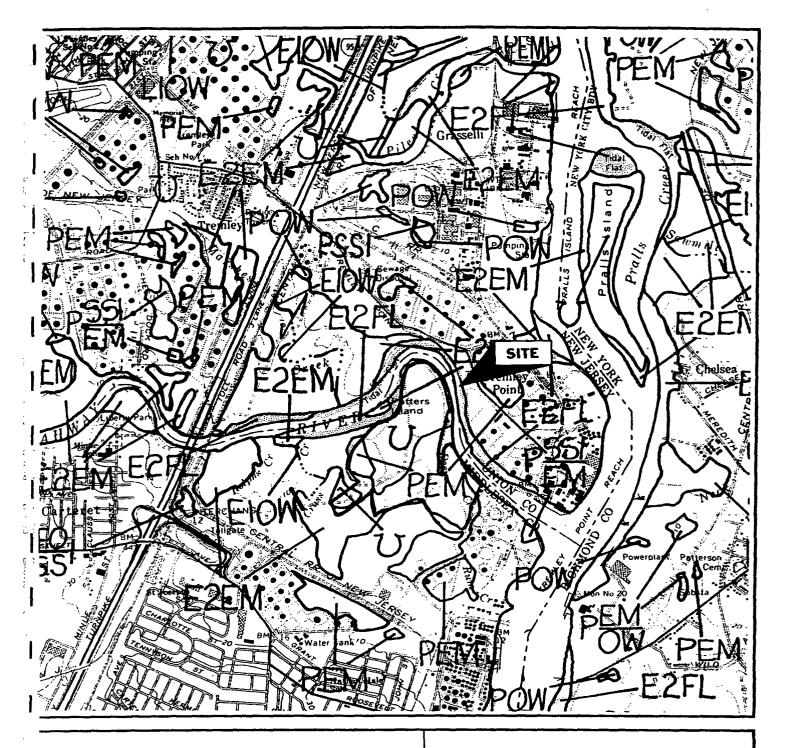
DATE: September, 1975

SCALE: Not to scale

N



FIGURE 3
TAX MAP
Cytec Impoundments
Carteret
Middlesex County, New Jersey



SOURCE: U.S. Fish & Wildlife Service, NWI Quadrangle Map, Arthur Kill, NY-NJ

#### LEGEND:

U-Upland

PEM (Palustrine emergent)

E2EM (Estuarine intertidal emergent)

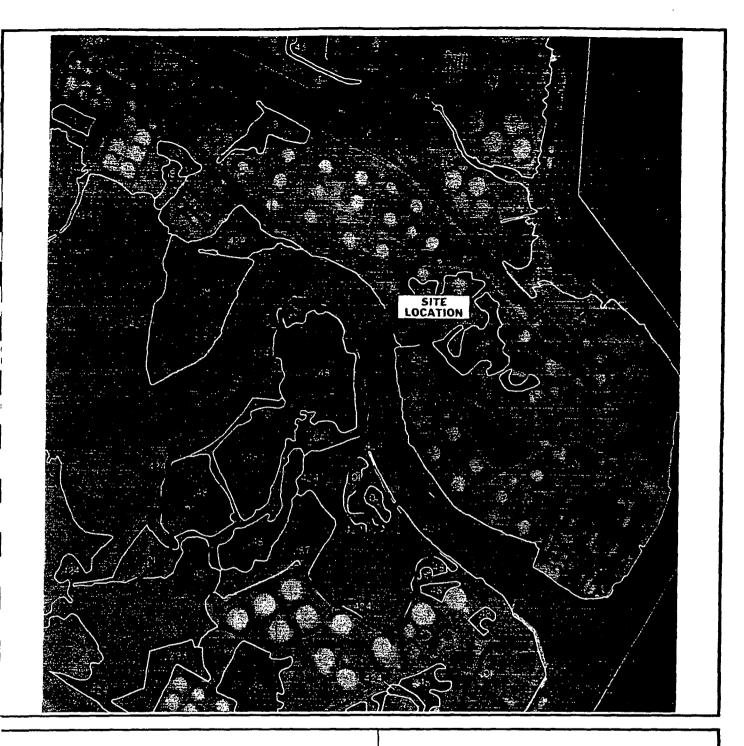
E10W (Estuarine subtidal open water, unknown bottom)

E2FL (estuarine intertidal flat)

SCALE: 1" - 2,000'



FIGURE 4
NWI MAP
Cytec Impoundments
Carteret
Middlesex County, New Jersey



SOURCE: NJ Freshwater Wetlands Map, Arthur Kill, NW (63-1)

#### LEGEND:

48 MODD [Disturbed areas (surface vegetation disturbed.
Nature of activity not readily apparent)]
424 UWL (Upland-Wetland Line)
01 (Upland)

SCALE: 1" - 1,000"

FIGURE 5
N.J. FRESHWATER WETLANDS MAP
Cytec Impoundments
Carteret
Middlesex County, New Jersey



SOURCE: Soil Survey of Middlesex County, NJ (1987), Atlas Sheet #4

#### LEGEND:

(PW) Psamments, waste substratum (SU) Sulfaquents and Sulfihemists, frequently flooded (UL) Urban land

SCALE: 1" - 1,666'



FIGURE 6 SOILS MAP Cytec Impoundments Carteret Middlesex County, New Jersey

## APPENDIX 1

# SOIL LOGS RECORDED ON THE SITE

(Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14)

(BOROUGH OF CARTERET, MIDDLESEX COUNTY, NEW JERSEY)

BY

#### FIELD DATA LOGS **SOIL LOG SHEET**

# SHISLER ENVIRONMENTAL CONSULTANTS, INC.

23 Running Brook Drive Perrineville, New Jersey 08535

Boring Number:

Orange # 1

Date:

26 June, 1997

Site:

Borough of Carteret, Middlesex Cty., NJ

Location:

Saltmarsh (see site plan)

Soil Series:

Mapped: Sulfaquents & Sulfihemists

Possible: Sulfaquents & Sulfihemists

Method:

3/4 inch soil auger

Depth to Saturation:

surface

Standing Water Level:

3 inches

Logged by:

Lynn Berreitter and Joe Shisler

Depth

(inches)

Soil Profile

0-12

Very dark grayish brown (10YR 3/2) muck

12-24

Dark gray (10 YR 4/1) muck

Hydric soil: Yes

Vegetation

Trees:

None

Shrubs:

Iva frutescens (Big-leaf sumpweed, FACW+) Juncus gerardii (Saltmeadow Rush, FAW+)

Herbs:

Spartina patens (Saltmeadow Cordgrass, FACW+)

Phragmites australis (Common Reed, FACW)

Vines:

None

Hydrological Features: Drainage patterns, saturated soils, hydric soils.

Is the area a wetland? Yes

#### FIELD DATA LOGS **SOIL LOG SHEET**

#### SHISLER ENVIRONMENTAL CONSULTANTS, INC. 23 Running Brook Drive Perrineville, New Jersey 08535

Boring Number:

Orange # 2

Date:

26 June, 1997

Site:

Borough of Carteret, Middlesex Cty., NJ

Location:

High Marsh Ecotone (see site plan)

Soil Series:

Mapped: Psamments

Method:

Possible: Psamments

3/4 inch soil auger

Depth to Saturation: Standing Water Level: >24 inches

>24 inches

Logged by:

Lynn Berreitter and Joe Shisler

Depth

(inches)

Soil Profile

0-24

Fill material

Hydric soil: No

Vegetation

Trees:

Robinia pseudo-acacia (Black Locust, FACU-)

Morus rubra (Red Mulberry, FACU)

Gleditsia triacanthus (Honey Locust, FAC-)

Shrubs:

None

Herbs:

Verbascum blattaria (Moth Mullein, NL)

Chrysanthemum leucanthemum, (Oxeye Daisy, NL)

Ipomoea lacunosa (Small-flower White Morning-Glory, FACW)

Vines:

None

Hydrological Features: None

Is the area a wetland? No

#### FIELD DATA LOGS SOIL LOG SHEET

#### SHISLER ENVIRONMENTAL CONSULTANTS, INC.

23 Running Brook Drive Perrineville, New Jersey 08535

Boring Number:

Orange # 3

Date:

3 June, 1997

Site:

Borough of Carteret, Middlesex Cty., NJ

Location:

Upland (see site plan)

Soil Series:

Mapped: Urban Land

Possible: Urban Land

Method:

3/4 inch soil auger

Depth to Saturation:

>24 inches

Standing Water Level:

>24 inches

Logged by:

Lynn Berreitter and Joe Shisler

Depth

(inches)

Soil Profile

0-24

Fill material

Hydric soil: No

Vegetation

Trees:

None

Shrubs:

Rhus copallinum (Dwarf Sumac, NL)

Herbs:

Artemisia vulgaris (Common Mugwort, NL)

Verbascum blattaria (Moth Mullein, NL)

Andropogon virginicus (Broom-sedge, FACU)

Vines:

None

Hydrological Features: None

Is the area a wetland?

No

## **APPENDIX II**

# PLANT SPECIES LIST

(Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14)
(BOROUGH OF CARTERET, MIDDLESEX COUNTY, NEW JERSEY)

BY

Table 1. The following is a list of plant species that commonly occurred on Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14 located in the Borough of Carteret, Middlesex County, New Jersey. The USFWS wetland indicator classification of each species is provided. Nomenclature follows USFWS (1988).

#### Scientific Name (Common Name, Indicator Status)

Ailanthus altissima (Tree of Heaven, NL)

Ambrosia artemisiifolia (Common Ragweed, FACU)

Andropogon virginicus (Broom-sedge, FACU)

Apocynum androsaemifolium (Spreading Dogbane, NL)

Artemisia vulgaris (Common Mugwort, NL)

Asclepias syriaca (Common Milkweed, NL)

Bacharis halimifolia (Eastern false-willow, FACW)

Celastrus scandens (American Bittersweet, FACU)

Chrysanthemum leucanthemum, (Oxeye Daisy, NL)

Coronilla varia (Crown Vetch, NL)

Dactylis glomerata (Orchard grass, FACU)

Elaeagnus angustifolia (Russian Olive, FACU)

Gleditsia triacanthus (Honey Locust, FAC-)

Impatiens capensis (Jewelweed, FACW)

Ipomoea lacunosa (Small-flower White Morning-Glory, FACW)

Iva frutescens (Big-leaf sumpweed, FACW+)

Juncus gerardii (Saltmeadow Rush, FAW+)

Linaria vulgaris (Butter and Eggs, NL)

Liquidamber styraciflua (Sweet Gum, FAC)

Melilotus alba (White Sweetclover, FACU-)

Melilotus officinalis (Yellow Sweetclover, FACU-)

Morus rubra (Red Mulberry, FACU)

Parthenocissus quinquefolia (Virginia Creeper, FACU)

Phragmites australis (Common Reed, FACW)

Phytolacca americana (Pokeweed, FACU+)

Prunus serotina (Black Cherry, FACU)

Rhus copallinum (Dwarf Sumac, NL)

Robinia pseudo-acacia (Black Locust, FACU-)

Rosa multiflora (Multiflora Rose, FACU)

Rumex crispus (Curled Dock, FACU)

Sambucus canadensis (Common Elderberry, FACW-)

Solidago sempervirens (Seaside golden-rod, FACW)

Spartina patens (Saltmeadow Cordgrass, FACW+)

Toxicodendron radicans (Poison Ivy, FAC)

Verbascum blattaria (Moth Mullein, NL)

Verbascum thapsus (Common Mullein, NL)

Continued on next page

#### Continued from previous page

OBL: A plant species that is generally (>99% of the time) found only in wetlands under natural conditions.

FACW: A plant species that usually (>66% to 99% of the time) is found in wetlands, but which may be found occasionally in uplands under natural conditions.

FAC: A plant species that sometimes (>33% to 66% of the time) is found in wetlands, but which may also be found commonly in uplands.

FACU: A plant species that is seldom (<33% of the time) found in wetlands and that usually occurs in uplands.

NI: Currently no agreement as to indicator status.

NC: A plant species not classified (recent additions to indicator list).

NL: A plant species not listed.

NS: A plant that has been identified to only Genus.

note: A negative sign (-) indicates a species less frequently found in wetlands. A positive sign (+) indicates a species more frequently found in wetlands (Reed 1986).

# APPENDIX III

# **PHOTOGRAPHS**

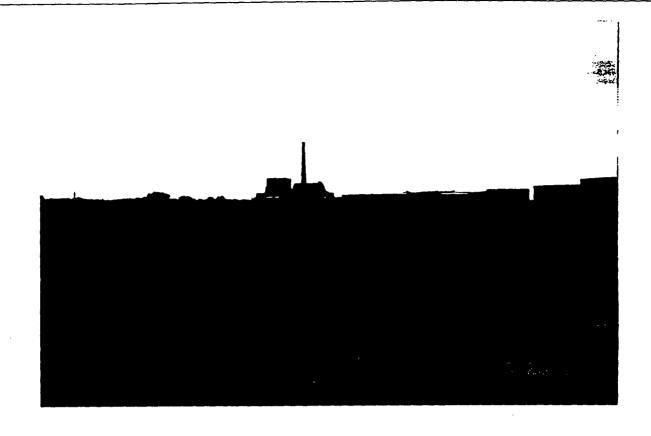
(Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14)

(BOROUGH OF CARTERET, MIDDLESEX COUNTY, NEW JERSEY)

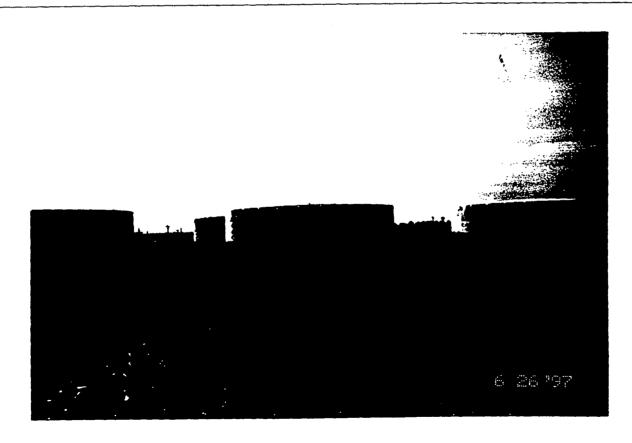
BY

SHISLER ENVIRONMENTAL CONSULTANTS, INC.

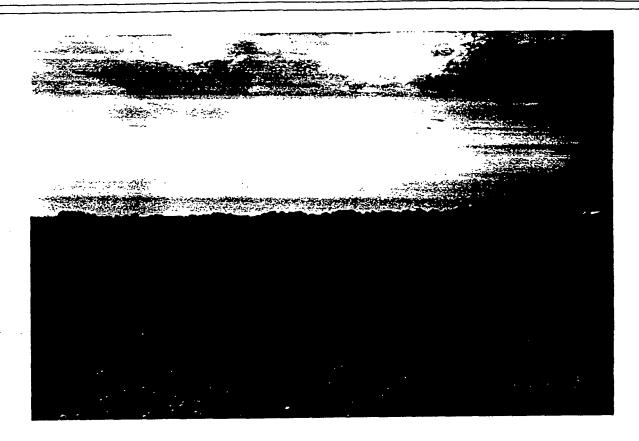
(see locations of photographs on enclosed site plan)



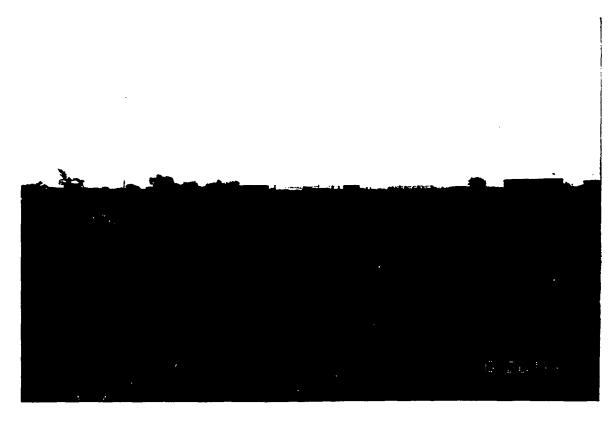
Photograph #1. View of upland field within Impoundment #2, facing south.



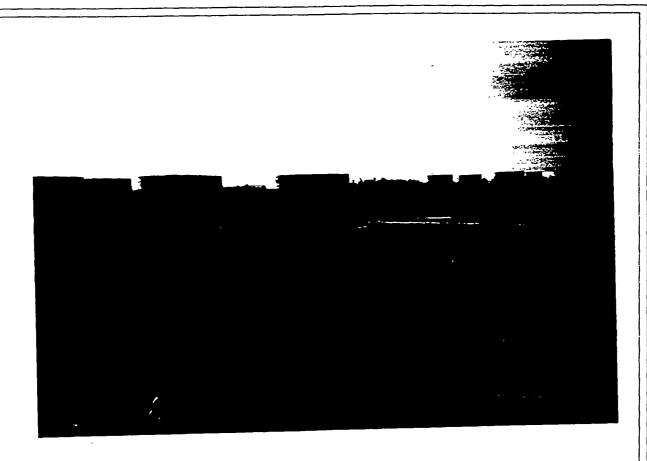
Photograph #2. View of upland field within Impoundment #2 and adjacent property, facing south.



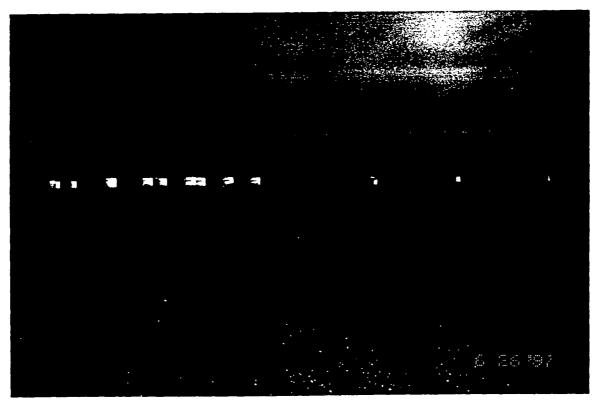
Photograph #3. View of upland/wetland boundary (wetland in foreground) within Impoundment #2, facing east.



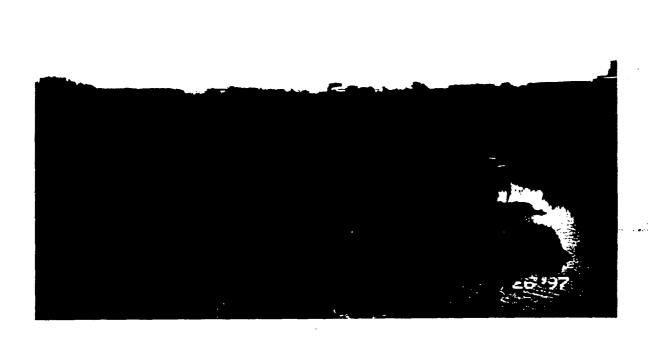
Photograph #4. View of salt marsh (Impoundment #4), facing east.



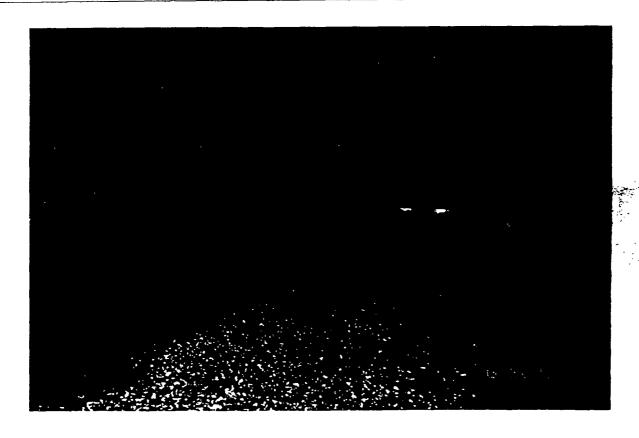
Photograph #5. View of Impoundment #3, facing southeast.



Photograph #6. View of berm along western edge of Impoundment #3, facing north (wetland to left of photo).



Photograph #7. View of wetland area adjacent to Impoundments #2 & #3 , facing southeast.



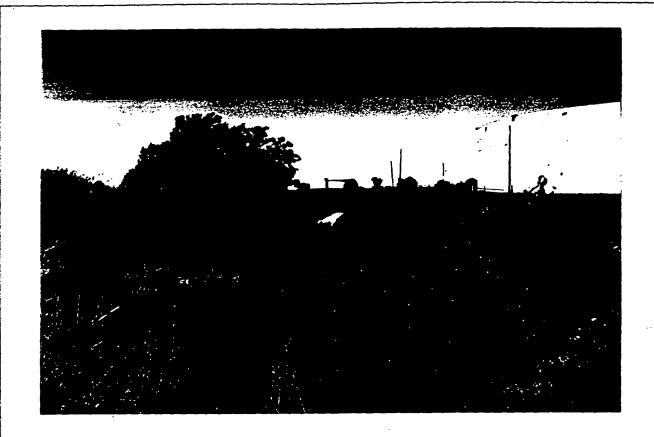
Photograph #8. View of berm adjacent to Impoundment #3, facing north (wetland to left of photo).



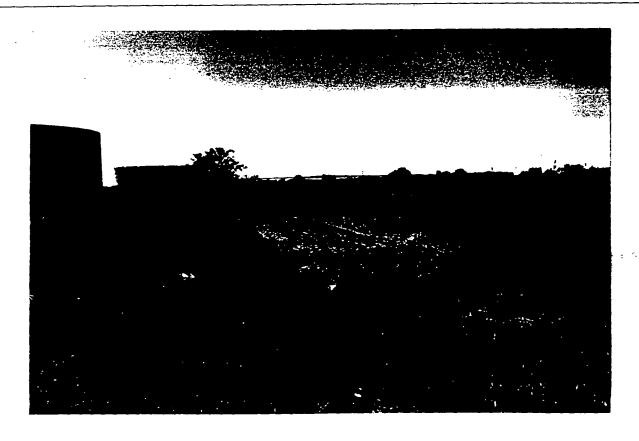
Photograph #9. View of start of the wetland line in southwest potion of the site, facing west.



Photograph #10. View of berm and wetland area adjacent to northern portion of Impoundment #3, facing northeast.



Photograph #11. View of western edge of Impoundment #1, facing north.



Photograph #12. View of southern edge of Impoundment #1, facing west.



Photograph #13. View of northern edge of Impoundment #1, facing west.



Photograph #14. View of eastern edge of Impoundment #1, facing northeast.

# APPENDIX IV RESUMES



### JOSEPH K. SHISLER, Ph.D.

23 Running Brook Drive Perrineville, New Jersey 08535 email: shisenv@bellatlantic.net

### **EDUCATION:**

1975 Ph.D

Zoology, Rutgers University, N.J.

1970 M.A.

Environmental Education, Glassboro State College, N.J.

1965 B.S.

Biology, Lenoir-Rhyne College, N.C.

President of Shisler Environmental Consultants, Inc., Perrineville, NJ. Formally at Rutgers University for over 15 years where he directed research on the management of wetlands, stormwater management and wetland mitigation. Dr. Shisler has been a consultant to the various state, federal and international agencies concerning wetlands and stormwater management issues and has published over 125 papers on the subject. Dr. Shisler's work was recognized by the New Jersey Wildlife Society who presented him with the 1980 Conservationist of the Year. Dr. Shisler has completed an evaluation of the wetlands on Staten Island for the New York Department of Environmental Conservation. Governor Kean appointed him chairperson of the newly formed New Jersey Wetlands Mitigation Council in 1989.

Invited participant in workshops concerned with Wetland Management, Mosquito Control, Dredge Disposal, Wildlife Management, Coastal Zone, Flood Plain Management and Stormwater Management.

### PROFESSIONAL BACKGROUND:

1991-Present

President of Shisler Environmental Consultants, Inc.

23 Running Brook Drive, Perrineville, New Jersey 08535

1983-1991

Vice-President and Partner of Environmental Connection, Inc.

6 Throckmorton Street, Freehold, New Jersey 07728

1975-1988

Associate Research Professor

Mosquito Research and Control, Rutgers University, New Brunswick, N.J. 08903

### **PUBLICATIONS:**

Published over 100 scientific papers in various periodicals.

#### PRESENTATIONS:

Presented over 150 scientific papers at various state national and international meetings.

I RUNNING BROOK DR.

IRRINEVILLE, NJ 08535

908 446 3659

.AX 908.446 2381

#### **EXPERT WITNESS**

Dr. Shisler has been qualified as an expert witness in various environmental fields including wetland delineations and management, wildlife management, ecology, stormwater management issues, environmental impact assessments, and pest management by various Municipal and County Planning Boards and Environmental Commissions including the following:

Aberdeen Township
Atlantic Highlands
Bernards Township
East Windsor Township
Franklin Township
Freehold Township
Galloway Township
Helmetta
Hightstown
Holmdel Township
Howell Township
Manalapan Township

Marlboro Township
Middletown Township
Millstone Township
Monroe Township
Morris County
Old Bridge Township
Spotswood
Tinton Falls Township
Washington Township
Upper Freehold Township
South River

### **TEACHING**

Dr. Shisler has served as a faculty member of Rutgers University and as an adjunct faculty member at the University of South Carolina and Trenton State College.

Dr. Shisler has participated in a number of short courses for professionals including:

### Office of Continuing Professional Education, Cook College, Rutgers University, New Brunswick, New Jersey

Stormwater Management for Engineers: 1984-1989

Sediment and Erosion Control: Planning, Design, and Application: 1986, 1987

Identification of New Jersey Wetlands: 1987, 1988

Coastal Zone Management: 1987 Stream Encroachment: 1989

Wetlands of the Northeast: 1989, 1990

Wetland Law and Regulations: 1992, 1994, 1995, 1996

Wetlands Mitigation: 1990, 1991 Wetlands Ecology: 1990, 1991 \* Faculty Coordinator

### The National Wetland Science Training Cooperative, L.C. Lee & Associates, Inc., Seattle, WA

Jurisdictional Delineation of Wetlands in the Mid-Atlantic States

1988 & 1989: New Brunswick, New Jersey

1990: Annapolis, Maryland

Constructed Wetlands for Stormwater Management:

1991: Seattle, Washington

### Executive Enterprises, Inc., New York, New York

Wetlands Regulations and Delineation, Washington, DC 1991

Wetlands: Delineation, Mitigation, and Permitting Procedures, Washington, DC 1992

### CONSULTANCY WITH STATE AND FEDERAL AGENCIES:

### U.S. Dept. of State - Agency for International Development

Overseas consultant to the US-AID antimalarial project in Zaire.

Invited participant and chairperson of the Water and Weed Management and Source Reduction Section for the Workshop "Comprehensive Vector Control - Current Status and Research Needs".

### U.S. Dept. of Interior - Park Service

Evaluated the development of a comprehensive mosquito control program for Cape Cod National Park.

### U.S. Environmental Protection

Wetlands mitigation in the northeastern United States.

Problem species associated with wetland mitigation.

Planning for 1990 Wetland Research.

### International Irrigation Management Institute Kandy, Sri Lanka, Environmental

Management for vector control.

### N.J. Dept. of Health

Mammal trapping and habitat identification consultant for possible vectors of Lyme disease.

### ADJUNCT FACULTY:

University of South Carolina, College of Health, The International Center of Public Health Research

### **AFFILIATIONS:**

Association of State Wetland Managers

Atlantic Estuarine Research Society

**Ecological Society of America** 

Estuarine Research Federation

National Association of Environmental Professionals

New Jersey Academy of Science

New Jersey Wildlife Society

Society of Ecological Restoration

Society of Wetland Scientists

The Wildlife Society

### **ADVISORY BOARDS:**

American Wetland Research Foundation, Inc. (1985-present)

New Jersey Builders Association Environmental Committee (1991-1992)

New Jersey Stormwater Technical Working Group (1979-1981)

New Jersey Stormwater Management Technical Committee (1991-1992)

New Jersey Wetlands Mitigation Council (1988-present Chairperson)

Pubic Service Electric and Gas, Management Plan Advisory Committee (1995-present)

### **CERTIFICATIONS:**

USEPA-Accredited Asbestos Building Inspector (1988-1992)

USEPA-Accredited Asbestos Management Planner (1988-1992)

OSHA 40-hr Hazardous Site Training (1994-present)

#### PERMITS:

U.S. Fish and Wildlife Service Master Bird Banding Permit (1975-1985)



### Lynn Berreitter

### 23 Running Brook Drive Perrineville, New Jersey 08535

email-cattails@concentric.net
http://www.concentric.net/~Cattails/index.shtml

### **EDUCATION**

Delaware Valley College, Doylestown, Pa. B.S., Agronomy & Environmental Science, 1993 Dean's List, 1991 to 1993.

Mercer County Community College, West Windsor, NJ.

A.A.S., Ornamental Horticulture & Land Use Management, 1991

Presidents List; Dean's List; Member Phi Theta Kappa Honor Society.

### PROFESSIONAL BACKGROUND

### Shisler Environmental Consultants, Inc. Wetland Scientist, December, 1996 to present

Primary responsibilities include conducting and reviewing wetland delineations, soil sampling, plant identification, environmental impact statements, tree inventories and environmental site assessments. Preparation and submittal of applications for Letters of Interpretation to the New Jersey Department of Environmental Protection (NJDEP) and to the U.S. Army Corps of Engineers (ACOE) for Jurisdictional Determinations. Preparation and submittal of permit applications to both the NJDEP and the ACOE for development in wetlands.

### Wetlands Ecological & Environmental Services

Owner, November, 1996 to present

Wetland delineations, plant identification, permitting, and environmental site assessments, environmental impact statements and tree inventories.

### Coastal Environmental Services, Inc., Princeton, NJ.

Wetland Scientist, 1993 to 1996

Primary responsibilities included conducting and reviewing wetland delineations, wetland restoration and mitigation monitoring, soil sampling, plant identification, preparation of permit applications for development in wetlands in accordance with the U.S. Army Corps of Engineers, the New Jersey Department of Environmental Protection, the Pennsylvania Department of Environmental Protection and the Pinelands Commission. Other responsibilities included management of greenway planning projects, habitat evaluations, environmental site assessments, environmental impact statements and surveys for threatened and endangered species.

RUNNING BROCK DR.

P. :RINEVILLE, NJ 08535

908 446.3559

F..X 908,446,238!

### Roy F. Weston, Inc., West Chester, Pa.

Internship, Winter 1993

Participated in quality assurance, quality control and in the making of graphs, graphics and charts for a remedial investigation project.

### The Plant Place, Glassboro, NJ.

Horticultural Technician, 1989 to 1993

Responsible for the care and maintenance of plants at corporate and commercial locations throughout NJ and PA.

### New Jersey Department of Agriculture, West Trenton, NJ.

Internship, Summer 1990

Field Technician for the State Biological Insect Laboratory. Monitored the Mexican Bean Beetle at site locations and when needed released a parasitic wasp to control infestations without the use of pesticides.

### Bear's Printworks, Trenton, NJ.

Founder, Owner/Operator, 1979 to 1989

Operated a commercial photographic lab specializing in archival processing and printing that served the professional photographic market.

### ADDITIONAL PROFESSIONAL TRAINING

Environmental Concern Inc., St. Michaels, Md.

Winter Wetland Delineation, 13-17 November 1995

### Rutgers University, New Brunswick, NJ.

Advanced Wetland Delineation Techniques, 1994. Pinelands of New Jersey, 1995, 1994, 1992, 1991. Landscape Restoration, 1994. Farmers and Environmentalists, 1994. Introduction to Wetlands Ecology, 1991.

### **AFFILATIONS:**

American Business Women's Association Environmental Law Institute Society of Wetland Scientists

### Listing of all Property, Owner within 200 ft.

### **Copy of Notification Letter**

## Copies of Documentation that Required Notifications were sent to:

- 1. Borough of Carteret;
- 2. Borough of Carteret Environmental Commission;
- 3. Borough of Carteret Planning Board;
- 4. Borough of Carteret Construction Official;
- 5. Middlesex County Planning Board; and
- 6. All Property Owners within 200 feet of Site.



RE: New Jersey Freshwater Wetlands Protection Act
Letter of Interpretation
Cytec Industries Inc.
Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10, through 14
Borough of Carteret, Middlesex County, New Jersey

Job No. 97201

### Dear Person:

This letter is to provide you with legal notification that Cytec Industries Inc., Carteret, NJ, is applying to the New Jersey Department of Environmental Protection, Environmental Regulation, Land Use Regulation Program for a Letter of Interpretation on the above referenced site.

A letter of interpretation is a legal document that establishes the presence, absence, or limits of freshwater wetlands, open water or transition areas on a subject property as defined at N.J.S.A. 13:9B-1 et. seq.. The width of the transition area adjacent to a wetland is determined by the resource value classification of the wetland. This information is also provided by a letter of interpretation. If any of these features are present on a parcel, the Department will regulate many types of activities on those areas adjacent to freshwater wetlands as defined in N.J.A.C. 7:7A-1.4, regulated activities.

The complete application package can be reviewed at the municipal clerk's office or by appointment at the Land Use Regulation Program office at the address listed below. The Department welcomes any information that you may provide concerning the presence of wetlands, open water or transition area on the referenced parcel. Written comments should be submitted within 15 days of receiving this letter. Comments will be accepted until the Department makes a decision on the application. Please submit your written comments along with a copy of this letter to:

New Jersey Department of Environmental Protection Land Use Regulation Element 5 Station Plaza, CN 401 Trenton, New Jersey 08625 Attn: Middlesex County Section Chief

23 RUNNING BROOK DR.

RRINEVILLE, NJ 08535

18 446.3669

F X 908.446.2381

As part of the Department's review of this application, Department personnel may perform a site inspection of your property. This site inspection will involve only land within 150 feet from the applicant's property line. This site visit will involve a visual inspection and possibly minor soil boring using a 4" diameter hand auger. The inspection will not result in any damage to vegetation or any improvements on your property. The Department will provide the environmental commission, the planning board of the municipality in which the property in located, and the county planning board, with a copy of the Department's letter of interpretation when issued.

If you have any questions, please do not hesitate to contact me at the above address.

Sincerely,

SHISLER ENVIRONMENTAL CONSULTANTS, INC.

Lynn Berry

cc: NJDEP



NUEL FRANGELLA, JR., C.T.A. ASSESSOR

### City of Linden

Union County, New Jersey
Tax Assessors
City Hall - 301 No. Wood Avenue
Linden, New Jersey 07036

(908) 474-8438

April 24, 1997

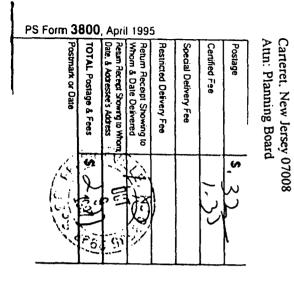
Blasland, Bouck & Lee, Inc. Michael P. Fleischner 6723 Towpath Road P.O. Box 66 Syracuse, NY 13214-0066

RE: BLOCK 9.03, Lot 21, Block 10, Lots 8,9,10,12 through 21; and, Block 11.01, Lots 8, 10 through 14, and 28

Dear Mr. Fleischner:

In reply to your letter dated April 7, 1997 requesting a list of property owners within 200 feet from the above subject property we are hereby submitting the following listing.

BLOCK	LOT(S)	OWNERS NAME AND ADDRESS	
9.3 PQ	21	Borough of Carteret	
587	16	George Sacks Inc. C/O BP Oil Inc. Prop Tax Dept. P.O. BX 94563, Cleveland, Obio	
587	15.01	30326 E F C Land Development Inc.	
		4700 South Wood Avenue, Linden, NJ 07036	
587 .	14	Tremley Point Industries 4700 Tremley Point Road, Linden, NJ 0703	
587	13	Citgo Petroleum Corp. P.O. Box 3758, Tulsa, Oklahoma 74102	



Borough of Carteret 61 Cooke Avenue

US Postal Service
Receipt for Certified Mail

95 h

0.15

SE

Special Delivery Fee

Restricted Delivery Fee

Per Return Receipt Showing to Whom & Date Delivered to Whom & Date Delivered to Whom.

A Date & Addressee's Address.

TOTAL Postage & Fees

Postmark or Date

S 1/3/7

P 456 210 359

US Postal Service
Receipt for Certified Mail

P 456 210 360

No Insurance Coverage Provided.

Do not use for International Mail (See several)

Middlesex County Planning Board

40 Livingston Ave.

New Brunswick, NJ 08903

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US Postal Service

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Borough of Carteret 61 Cooke Avenue Carteret, New Jersey 07008 Attn: Clerk

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P 456 210 358

Receipt for Certified Mail

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Borough of Carteret 61 Cooke Avenue

Carterel, New Jersey 07008

Attn: Environmental Commission

Certified Fee

US Postal Service
Receipt for Certified Mail

Borough of Carteret 61 Cooke Avenue Carteret, New Jersey 07008 Attn: Construction Official

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BLOCK	LOT(S)	OWNERS NAME AND ADDRESS
Waterfron	t	U.S. Army Corps Of Engineers, New York District 26 Federal Plaza, New York, NY 10278
N.J. D.E.	P.	N.J. Department of Environmental Protection CN 402, Trenton, New Jersey 08625
Easement		Michael F. Stonack, Manager, Engineering Design One Elizabethtown Plaza, 3rd Flr., East Union, NJ 07083
Easement		Anne R. Matthews, System Development Rep Elizabethtown Water Co. 1341 North Avenue, Plainfield, NJ 07061-0001
Easement		Public Service Electric & Gas Co. 900 W. Grand St., Elizabeth, NJ 07202
Easement		New Jersey Bell Telephone Co. 657 Florida Grove Rd., Hopelawn, NJ 08861
Easement		Suburban Cablevision 800 Rahway Avenue, Union, NJ 07083
EASEMENT		Sun Pipe Line Co., Right of Way Dept. 1801 Market St., 26th Floor Philadelphia, PA 19103-1699

LIST CERTIFIED TO BE AN ABSTRACT OF TRUE RECORD CONTENT

Emanuel F. Frangella, Jr.

EFF:hs

Tax Assessor



## Borough of Carteret

MIDDLESEX COUNTY

### 61 COOKE AVENUE CARTERET, NEW JERSEY 07008

Phone

(908) 541-3825

Fax

(908) 541-2884

April 15, 1997.

Mr.
Michael P. Fleischner
BBL
Blasland, Bouch & Lee, Inc.
8 South River Road
CRANBURY, N.J. 08512-9502

Dear Sirs :

As per your request, the following properties, are 200 square feet around the property locate at landfield also been known as Block V , Lots 21,8,9,10,12 T. 21 and 8,10 T.14 & 28. 9.03-10- & 11.01

If you need further information, please do not hesitate to contact this office.

Sincerely

William H. Marbach III, C.T.A.

Tax Assessor

ASSESSORS OFFICE
CARTERET BORD HALL 4-1
COOKE AVENUE
CARTERET N.J. 07008
CONTROL OF CONTROL
CO

BLOCK	LOT	QU،	PROPERTY LOCATI	OWNERS NAME	ADDRESS	CITY	STATE	ZIP
9.3	5.1		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
9.3	6.2		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
9.3	20.1		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
10	5		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
10	6		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
10	7		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
10	11		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
10	22		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
10	25		SALT MEADOW	GATX - TAX DEPT	500 WEST MONROE	CHICAGO	ILLINOIS	60661
11.1	7		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
11.1	9		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
11.1	15		SALT MEADOW	MIDDLESEX LANDFILL CORP	238 SHEPERD AVENUE	EAST ORANGE	NEW JERSEY	07000
11.1	16		SALT MEADOW	G & G EXCAVATING CO & S & E GORECKI	15 SHAROT STREET	CARTERET	NEW JERSEY	07008
11.1	17		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
11.1	18		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
11.1	27		SALT MEADOW	BOROUGH OF CARTERET	61 COOKE AVENUE	CARTERET	NEW JERSEY	07008
11.5	65		SALT MEADOW	SICA, PETER J	1000 BLAIR ROAD	CARTERET	NEW JERSEY	07008

PS Form **3800**, April 1995 NJ Bell Telephone co. 657 Florida Grove Road Hopelawn, NJ 08861 Special Delivery Fee US Postal Service
Receipt for Certified Mail ס £ 56 69 N 69 07, 374

P 456 210 377

**US Postal Service** 

**Receipt for Certified Mail** 

Michael Stonack, Manager, Eng. 1 Elizabethtown Plaza, 3rd Flr. Est Union, NJ 07083

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P 456 210 376

**US Postal Service** 

### Receipt for Certified Mail No Insurance Coverane Provided

Anne Matthews, Sys. Dev. Rep. Elizabethtown Water Co. 1341 N. Avenue Plainfield, NJ 07061-0001

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P 456 210 375

**US Postal Service Receipt for Certified Mail** 

Public Service Electric & Gas Co. 900 W. Grand Ave. Elizabeth, NJ 07202

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For	Form 3	Postmark or Date	3.7

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US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.

Citgo Petroleum Corp. PO Box 3758

Tulsa, Oklahoma 74102

Certified Fee Restricted Delivery Fee Special Delivery Fee

PS Form 3800, April 1995

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P 456 210 380

PS Form 3800, April 1995

TOTAL Postage & Fees

Return Receipt Showing to Whom & Date Delivered Restricted Delivery Fee Special Delivery Fee Certified Fee

New York. NY 10278

US Army Corps of Engineers NY Dis. 26 Federal Plaza

**US Postal Service Receipt for Certified Mail** 

Tremley Point Industries 4700 Tremely Point Road Linden, NJ 07036

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P 456 210 381

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Gerorge Sacks Inc. C/O BP Oil Inc. Prop. Tax Dept. PO Box 94563 Cleveland, Ohio 30326

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P 456 210 382

**US Postal Service** Receipt for Certified Mail

Peter Sica 1000 Blair Road Carteret, NJ 07008

	Postage	\$ 34
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US Postal Service
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**Receipt for Certified Mail** 

426 012 **364** 

US Postal Service
Receipt for Certified Mail

Middlesex Landfill Corp 238 Sheperd Ave. East Orange, NJ 07000 TOTAL Postage & Fees Special Delivery Fee Restricted Delivery Fee Certified Foo

PS Form 3800, April 1995

456 210 385

Special Delivery Fee

Restricted Delivery Fee

Certified Fee

**US Postal Service** Descint for Cartified Mail

GATX Tax Dept. 500 West Monroe Chicago, IL 60661

PS Form 3800, April 1995

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P 456 210 372

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EOE

G&G Excavation Co & S&E Gorecki

Carteret New Jersey 07008

15 Sharot Street

### **US Postal Service Receipt for Certified Mail**

Sun Pipe Line co. Right of Way Dept. 1801 Market St. 26<sup>th</sup> Floor Philadelphia, PA 19103-1699

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### **US Postal Service** Receipt for Certified Mail

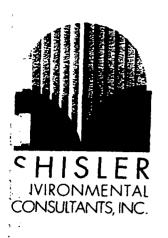
Suburban Cablevision 800 Rahway Avenue Union, NJ 08083

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Verification that all Information Submitted to the Department was forwarded to the Borough of Carteret Clerk

Attn: Clerk

Carteret, New Jersey 07008



Postage \$

Certified Fee

Special Delivery Fee

Whom A Date Delivery Fee

Whom A Date Delivery Fee

Postmark or Date

Fold at line over top of shyelope to the right of the return address

CERTIFIED

P 158 542 324

Borough of Carteret 61 Cooke Avenue Carteret, NJ 07008 Attn: Municipal Clerk

RE: New Jersey Freshwater Wetlands Protection Act

Letter of Interpretation Cytec Industries Inc.

Block 10, Lots 8, 9, 10, 12 through 21; and Block 11.01, Lots 10 through 14

Borough of Carteret, Middlesex County, New Jersey

Certified Mailing P-158-542-324

Job No. 97201

### Dear Clerk:

The enclosed information is in reference to the above project application to the New Jersey Department of Environmental Protection, Environmental Regulation, Land Use Regulation Program for review. The applicant is required to submit a completed copy of the application information to the clerk of the municipality in which the application is made.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

SHISLER ENVIRONMENTAL CONSULTANTS, INC.

Lynn Berreitter

23 RUNNING BROOK DR.

cc: NJDEP

F RINEVILLE, NJ 08535

5 8 446 3669

FAX 908,446,2381

Wetlands Location Map and Impoundment Cross Sections

Land Use Regulation
Program Application Form (LURP #1)

# State of New Jersey Department of Environmental Protection Land Use Regulation Program Application Form (LURP #1)

	you are applying for a CAFRA Permit by Rule, you need to complete items 1 thru 6 and the signature area on page	: 3 on			
1.	pplicant Name Cytec Industries Inc. Daytime Phone # (973) 425-8	<u>40</u> 0			
	Address 5 Garret Mountain Plaza				
	City West Paterson State NJ Zip 07424				
2. <i>A</i>	gent Name Andrew N. Johnson, P.E. Firm Blasland, Bouck & Lee, Inc.	<del>,</del>			
<u> </u>	Address 8 South River Road Phone # (609) 860-0590				
3. P	City Cranbury State NJ Zip 08512 Cytec Carteret - Dredge oject Name Material Land Improvements Location Carteret				
<b></b>	Municipality Carteret County Middlesex  Block 10 Lots 8,9,10 and 12 through 21  Block(s) Block 11.01 Lots 10 through 14 Lot(s)	~~			
	State Plane Coordinates N 640850 feet E 2125400	Stock			
	Nearest Waterway Rahway River and Arthur Kill Watershed				
	tal Fees \$3890 Fees Paid Project Cost Check Number	_			
i. P	pject Description: Placement of stabilized dredge material over closed sludge				
	impoundments to facilitate redevelopment and beneficial re-use of the property.				
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-		_			
	CIAL USE ONLY				
Ve Number	Permit Code:	-,			
ate Receive	: Project Manager:   •	۱ إ			
7th Day:	Project Engineer:				
hb Day;	Date Entered:				
SU Date:	Points Assigned:				
Ref#	495				

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6.	Application(s) for:	(Picase check all that apply)
----	---------------------	-------------------------------

Stream Encroachment;	Permit	 Waiver	
CAFRA:	Individual Permit Exemption Request	 General Permit Permit by Rule	
Freshwater Wetlands:	Individual Permit Transition Area Waiver Exemption Request	 General Permit apach a Letter of Interpretation Open Water Fill Permit	X
Waterfront Development:	Residential	 Commercial	
Upland Waterfront Development:	Residential	 Commercial	
Water Quality Certificate		Tidal Wetlands (1970)	-
Federal Consistency Determination	<del></del>	Jurisdictional Determination	
Permit Modification (specify)			-
Other (specify)		 	

1. Indicate below if any of the following approvals, denials or certifications were received for the project site or are required for the proposed project:

• In Column A, indicate application status: (P for - pending, A for - approved, D for - denied, T for - to be applied for, or O for - other (explain other).

• In Column B, indicate application, permit, or docket number.

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	•	В		A	B
CAFRA Permit			Stream Encroachment Permit		<del></del>
AFRA Exemption			Stream Encroachment Waiver		
Waterfront Davelopment Permit	<u>T</u>		Water Quality Certificate	-	•
.iel Wetlands (1970) Permit			Tidelanda (Riparlan) Conveyance		
tewide General Froshweter Wellands			Dam Construction or Repair Permit		
Frankwater Wetlands ter of Interpretation	<u> </u>	<del></del>	Pinelands Certificate of Filing		
Freshwater Wetlands			D & R Canal Commission Certificate		
" asition Area Waiver				<del></del>	
Individual Freshwater Watlands Permit		•	Federal Permita (Specify)		
Freshwater Wetlands Exemption			State Permits (Specify)		
P nit Modification specify # 4 1991)					

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### Applicant Signature\*

\*All applicants must complete this section including those applying for Permit by Rule. I certify under penalty of law that the information provided in this document is true and accurate. I am aware that there are significant civil and criminal penalties for submitting false or inaccurate information. (If corporate entity, print/type the name and title of person signing on behalf of the corporate entity.) CYTEC INDUSTRIES INC. Signature of Applicant/Owner Signature of Applicant/Owner Harold Porosoff, Vice President 10-24-97 Date PROPERTY OWNER'S CERTIFICATION I hereby certify that the undersigned is the owner of the property upon which the proposed work is to done. This endorsement is certification that the owner grants permission for the conduct of the proposed activity. In addition, I hereby give unconditional written consent to allow access to the site by representatives or agents of the Department for the purpose of conducting a site inspection or survey of the project site. In addition, the undersigned property owner hereby certifies: 1. Whether any work is to be done within an easement - Yes \_\_\_\_\_ No \_\_\_\_ 2. Whether any part of the entire project (e.g., pipeline, roadway, cable, transmission line, structure, etc.) will be located within property belonging to the State of New Jersey - Yes\_\_\_\_\_ No \_\_\_\_X Type or Print Name and Address of Owner, if different from Item 1 on Page 1 Signature of Property Owner

Harold Porosoff, Vice President Cytec Industries Inc.

Andrew N. Johnson, P.E. Type: Name and Date

Executive Vice President Position, Name of Firm

Blasland, Bouck & Lee, Inc.

B. APPLICANT'S AGENT NOTE: Notary seal is required when an agent is used.  I Harold Porosoff , the Applicant/Ow	
pertaining to my application the following person:	mer, authorize to act as my agent/representative in all matte
Name Andrew N. Johnson, P.E.	
Occupation/Profession Engineer	
`	H Set
	(Signature of Applicant/Owner)
	AGENT'S CERTIFICATION
	Sworn before me
l agree to serve as agent for the above-mentioned applicant	this day of Northber 11 1997
april a fin	Panela L. Boslowies)
(Signature of Agent)	Notary Public  My Commission Expires  July 12, 1999
STATEMENT OF PREPARER OF PLANS, SPECIFICATION	ONS, SURVEYOR'S OR ENGINEER'S REPORT
I hereby certify that the plans, specifications and engineer's rep	oort, if any, applicable to this project comply with the curren
rules and regulations of the New Jersey Department of Environn	nental Protection with the exceptions as noted.

(revised through June 1995)